IN THE SPECIFICATION:

Please replace paragraph [0010] with the following:

[0010] The implantation procedure often relies on a fluoroscope to permit the practitioner to view certain anatomical features and the leads current position with respect to those features. Fluoroscopy does not illustrate soft tissue very well and provides virtually no guidance with respect to locating the coronary sinus. Thus, the practitioner is working almost entirely ~~be~~ by feel.

Please replace paragraph [0014] with the following:

[0014] ~~FIGS. 2A-2B are~~FIG. 2 is a schematic illustration~~s~~ of a lead having a plurality of sensors.

Please delete paragraph [0045].

Please replace paragraph [0046] with the following:

[0046] The representations provided in FIGS. 5B-5E apply to configurations having a single temperature sensor as well as multiple sensors. That is, a single sensor 14 moved along the trajectories indicated in FIG. 5A, will in fact provide the indicated results. However, with a single temperature sensor 14, it may be more difficult to determine a course of direction based upon any given data point. With multiple, directionally distinct sensors 14, each provides the above described information with the addition of a directional component. Thus, a predictive path can be plotted. For example, consider a lead 10 having multiple sensors 14 arranged in different directions~~, e.g., circumferentially as illustrated in FIG. 2B~~. If the lead 10 is positioned so that ~~is~~ it represents path 2 of FIG. 5A, then sensors 14 facing the coronary sinus 32 would sense a higher temperature than those facing the center of the right atrium.

Please replace paragraph [0048] with the following:

[0048] In one embodiment, the navigational aides are used in concert with existing medical and sensory equipment to aide the physician. FIG. 7 is a schematic illustration of such a system. The patient 50 has an appropriate device, such as lead 10, equipped with one or more sensors 14 to sense selected parameters, such as temperature. This sensor data 52 is output to a processor 58. In addition, imaging data 54 is also gathering from the patient ~~5~~50. This imaging data may take any form such as MRI, fluoroscopy, CAT scans, PET scans or the like. Such imaging data may be live or current, e.g., fluoroscopy, or may have been previously captured.

Please replace paragraph [0051] with the following:

[0051] Various other physical parameters may have an affect on the data sensed by sensor 14. For example, when sensing temperature the patient's respiration and cardiac cycle cyclically affect the temperature. Thus, supplemental patient data 56 is gathered and utilized by the processor 58 to generate the navigational information. The supplemental patient data ~~58~~ 56 includes, for example, EEG, EKG, blood pressure, respiration rate, tidal volume, patient position/orientation, ambient temperature, patient temperature, drug/pharmacology data (type, rate, dosage, etc.), implant data (e.g., if already in place), or other parameters that would affect the sensed data 52.

Please replace paragraph [0061] with the following:

[0061] FIG. 11 is a schematic diagram illustrating one embodiment of a device having thermistor for navigating through cardiac anatomy. A lead ~~100~~101, or other navigable device, includes a thermistor 102 disposed near a distal end of the lead ~~100~~101. The lead ~~100~~ 101 includes sheathing 104 that may encase or, as in the illustrated embodiment, partially expose a portion of the thermistor 102 to allow for rapid response times. The thermistor 102 is electrically connected to a wheatstone bridge arrangement 106 and a lock-in amplifier 108. Such an

arrangement increase the signal to noise ratio and permits improved data collection and analysis. The output from the lock-in amplifier 108 is passed to a computer 110 for processing and subsequent display.

Please replace paragraph [0062] with the following:

[0062] In this embodiment, the lock-in amplifier 108 measures a relatively small signal despite significant noise by taking advantage of an AC character of the signal. The illustrated embodiment measures the resistance changes of the thermistor 102 that forms a portion of the wheatstone bridge 106, with the lock-in amplifier 108 providing an AC signal. The lock-in amplifier 102 provides a reference signal at the same frequency of the sensed signal with a constant phase difference via a phase locked loop. Demodulating the signal creates a DC signal that is proportional to the original AC signal. By passing this signal through a low pass filter, only a DC signal remains that is proportional to the sensed signal. The noise is determined by the bandwidth of the low pass filter. Such an arrangement provides fast response times and accurately measures temperature differential in the necessary range.

Please replace paragraph [0068] with the following:

[0068] An appropriate temperature sensor 230 is disposed within the pin 220, as illustrated in the various embodiments of FIGS. 13A-13E. The temperature sensor 230 is a thermistor or other appropriate temperature sensing element having the appropriate electrical contacts or wires 235 extending out from the pin 220. The pin 220 has a hollow interior to receive the sensor 230 or the temperature sensor 230 is formed as an integral component of the ~~pint~~ pin 220 during manufacture.